

**REMARKS**

This Amendment is submitted after a Request for Continued Examination. The Advisory Action mailed October 18, 2004, has been received and reviewed. Claims 1 through 20, and 22 are currently pending in the application. Claims 1, 10, and 17 have been amended.

Applicant asserts that a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Brothers v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The identical invention must be shown in as complete detail as is contained in the claim. *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

After carefully considering the cited prior art, the rejections, and the Examiner's comments, Applicant asserts that the Hayward et al. reference does not and cannot anticipate the claimed inventions of claims 1 through 21 under 35 U.S.C. § 102 because the Hayward *et al.* reference fails to identically disclose, either expressly or inherently, each and every element as set forth in the presently amended independent claims in as complete detail as is contained in such claims.

Turning to the cited prior art, the Hayward *et al.* reference describes a method of providing support to a user of a computer peripheral which depends on computer software, loaded on a work station separate from the peripheral. The work station user may use the software to interpret and respond to detected indicia from the firmware on the peripheral (Hayward *et al.* column 2, lines 25-30). The peripheral indicia that the computer software senses includes a model number, part number, serial number, date of manufacture, error code, or a code indicative of a consumable reaching a predetermined threshold (Hayward *et al.* column 2, lines 31-35).

Presently amended independent claim 1 of the present invention includes the elements of the invention calling for "assigning a numerical value to the degree of utilization of said at least one functional characteristic," "maintaining said numerical value in a memory of said printer", "comparing said information to said numerical value to select a preferred upgrade using inputs of said individual numerical values into a logic protocol to arrive at an output value;" and "suggesting said preferred upgrade to a user of said printer for installation on said printer based upon said output value". Applicant asserts that the Hayward *et al.* reference

fails to identically disclose, either expressly or inherently, each and every element as set forth in the presently amended independent claim 1 in as complete detail as is contained in such claim. Specifically, the Hayward *et al.* reference does not describe “assigning a numerical value to the degree of utilization of said at least one functional characteristic” as disclosed in claim 1 of the instant application. Hayward *et al.* describes a method of using a computer software program to sense indicia of a peripheral device 10. As previously mentioned, the peripheral indicia sensed by the computer 30 includes a model number, part number, serial number, date of manufacture, error code, or a code indicative of a consumable reaching a predetermined threshold (Hayward *et al.* column 2, lines 31-35). Hayward *et al.* does not describe assigning a numerical value of any kind.

Furthermore, Hayward *et al.* fails to describe “maintaining said numerical value in a memory of said printer” as disclosed in presently amended independent claim 1. In contrast to the elements of presently amended independent claim 1, Hayward *et al.* discloses that a user may access the status of the peripheral device 10 by using a software loaded on a separate workstation 30 (Hayward *et al.* column 6, lines 25-33; FIGS. 2 and 6). The user software on workstation 30 merely monitors the peripheral’s firmware 16 through bus 32 and reports the peripheral condition, such as whether a printer is out of paper, through a user interface on workstation 30 (Hayward *et al.* FIG. 6). The peripheral firmware 16 is not maintaining a numerical value in a memory. Hayward discloses that the condition of the peripheral device 10 is derived from sensors 12 and machine state 14, which is directed through the firmware 16 (Hayward *et al.* FIG. 2). There is no description of maintaining a numerical value, or even a threshold value, in a memory of the peripheral 10. As such, Hayward *et al.* fails to identically describe, either expressly or inherently, each and every element as set forth in presently amended independent claim 1 in as complete detail as is contained in the claim.

Hayward *et al.* fails to describe anywhere whatsoever either “comparing said information to said numerical value to select a preferred upgrade using inputs of said individual numerical values into a logic protocol to arrive at an output value;” or “suggesting said preferred upgrade to a user of said printer for installation on said printer based upon said output value”.

Therefore, presently amended independent claim 1 and each of dependent claims 2 through 9 depending therefrom are allowable.

Additionally, independent claim 10, of the present invention, recites elements of the invention calling for “assigning fuzzy value scores to said usage of each of said functional characteristics of the printer using a logic protocol for such usage of said functional characteristics for an output value”, “comparing said fuzzy value scores having an output value to said selection scores to select a preferred upgrade available for the printer” and “suggesting said preferred upgrade to a user of said printer based on said output value”.

Applicant asserts that the Hayward *et al.* reference fails to identically describe, either expressly or inherently, each and every element as set forth in presently amended independent claim 10 in as complete detail as is contained in such claim.

The Hayward *et al.* reference does not expressly or inherently describe a method of “assigning fuzzy value scores to said usage of each of said functional characteristics of the printer using a logic protocol for such usage of said functional characteristics for an output value” as is claimed in the elements of presently amended independent claim 10 (See Claim 10, line 4). By contrast, Hayward *et al.* describes that peripheral conditions are derived from sensors 12 and machine state 14 in firmware 16 (Hayward *et al.* column 5, lines 13-14). Specifically, Hayward *et al.* describes that a plurality of peripheral device sensors 12 send error signals or condition indicators through the firmware 16 and the bus 32 to the workstation 30 where the application program alerts the user to the condition of the peripheral with a response from the memory of the work station 30 (Hayward *et al.* column 6, lines 25-34; FIG. 6). The firmware 16 is merely conveying the condition of the peripheral to the computer 30 where the application software interprets the signals. Hayward *et al.* does not expressly or inherently describe that sensing the peripheral condition involves a method of assigning fuzzy value scores to any functional characteristics of a peripheral. As such, Applicant respectfully asserts that Hayward *et al.* makes no description of assigning fuzzy value scores to the usage of the functional characteristics of the peripheral.

Furthermore, Hayward *et al.* reference fails to make any mention of fuzzy value scores or even use the word “fuzzy.” Accordingly, the cited reference makes *no express or inherent disclosure of a method of assigning fuzzy value scores* to any usage or functional characteristics of the peripheral. As such, Hayward *et al.* fails to identically describe, either expressly or inherently, *each and every element* as set forth in claim 10 in as complete detail as is contained in the claim. Therefore claim 10 is not anticipated by Hayward *et al.*

Accordingly, presently amended independent claim 10 and each of dependent claims 11 through 16 depending therefrom are allowable.

Finally, presently amended independent claim 17 of the present application recites as elements of the invention calling for “a printer including a memory,” “a usage record stored within said memory,” “a selection database stored within said memory,” and “a microprocessor located within said printer, said microprocessor capable of following a set of instructions to select a preferred upgrade by analyzing said usage record using a fuzzy logic protocol for forming an output value using said fuzzy logic protocol and comparing said analysis to said selection database for selecting an upgrade based upon said output value.”

Applicant asserts that the Hayward *et al.* reference fails to identically describe, either expressly or inherently, each and every element as set forth in presently amended independent claim 17 in as complete detail as is contained in such claim.

Hayward *et al.* describes a system comprising a computer software program to sense indicia of a peripheral device 10. Hayward *et al.* does not describe a printer including a memory. Rather, Hayward *et al.* describes the user software on workstation 30 which merely monitors the peripheral's firmware 16 through bus 32 and reports the peripheral condition (*i.e.*, whether a printer is out of paper) to the user through a user interface on workstation 30 (Hayward *et al.* FIG. 6). However, the cited reference fails to describe that the peripheral includes a memory.

Furthermore, Hayward *et al.* does not expressly or inherently describe a selection database stored within a printer memory, an element of presently amended independent claim 17. On the other hand, Hayward *et al.* discloses a software application on computer 30 which receives the peripheral condition from the firmware 16 over bus 32 and then checks to see if the necessary user instructions are on the *memory of the computer 30* (Hayward *et al.*, column 6, lines 20-35). The user instructions are stored on the computer 30. Accordingly, Hayward *et al.* fails to describe a database stored within a printer memory.

Lastly, Hayward *et al.* does not expressly or inherently describe a printer with a microprocessor capable of using a fuzzy logic protocol for forming an output value using said fuzzy logic protocol and comparing said analysis to said selection database for selecting an upgrade based upon said output value, as disclosed in presently amended independent claim 17. Hayward *et al.* discloses a peripheral 10 connected to a computer work station 30

(Hayward *et al.*, FIG. 2). However, Hayward *et al.* fails to describe a peripheral 10, such as a printer, with any kind of microprocessor, much less a microprocessor capable of “following a set of instructions to select a preferred upgrade by analyzing said usage record using a fuzzy logic protocol and comparing said analysis to said selection database.” Therefore, contrary to the elements of presently amended independent claim 17, Hayward *et al.* does not make express or even inherent disclosure of a printer with a microprocessor capable of using a fuzzy logic protocol to analyze a usage record.

As such, the cited reference, Hayward *et al.*, fails to identically describe, either expressly or inherently, *each and every element* as set forth in presently amended independent claim 17 in as complete detail as is contained in the claim. Therefore presently amended independent claim 17 is not anticipated by Hayward *et al.*

Accordingly, presently amended independent claim 17 and each of dependent claims 11 through 16 depending therefrom are allowable.

**CONCLUSION**

In view of the amendments and remarks, it is believed that claims 1, 10, and 17 are clearly allowable over the cited prior art. Applicant requests the allowance of claims 1, 10, and 17 and the dependent claims therefrom and the case passed for issue. Should the Office determine that additional issues remain which might be resolved by a telephone conference, it is respectfully invited to contact Applicant's undersigned attorney.

Respectfully submitted,



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